SUMMER
PERIL

FOREWORD

by the

Premier of Victoria,

The Honourable R. J. Hamer, E.D., M.P.

Victoria, along with Southern California, shares the reputation of being the most fire-prone area in the world.

Throughout our history, bush-fires have caused tragic loss of life to humans and stock, the destruction of natural resources, homes and other public and private property.

Our fire-fighting and prevention authorities are, without doubt, among the most efficient and best equipped of any but their work and efforts are not fully effective without public co-operation.

It is with the aim of ensuring this co-operation that I commend this publication —" Summer Peril "—to the man on the land and the city dweller.

It gives advice in a series of easily read articles and pictures on how to prevent fires, how to protect your life and property against fire and the best method of surviving in the event of being threatened by an outbreak.

A knowledge of fire prevention and ways of surviving is not a great burden to bear ; in fact, it could be the means of saving your own life.

" Summer Peril " provides this information and I have much pleasure in commending it to all Victorians.

R. J. HAMER,
Premier.

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This book was prepared for the Government of Victoria by a committee consisting of Mr. V. P. Cleary, B.Sc.For., Fire Protection Officer, Forests Commission; Mr. S. M. Taylor, Assistant Chief Officer, Country Fire Authority; Mr. S. T. Richards, M.I.FireE., Assistant Chief Officer, Metropolitan Fire Brigade; and Mr. R. L. Underwood, A.A.S.A., A.C.I.S., Research Officer, Chief Secretary's Department.

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Fire prevention concerns you, your wife, your children, your relatives, your friends and your neighbours.
THIS BOOK IS ALL ABOUT FIRE AND HOW YOU CAN PREVENT IT . . SO PLEASE
READ IT . . REMEMBER IT . . AND ABOVE ALL TAKE NOTICE OF IT
Issued by the Government of Victoria in the interest of fire prevention and community safety.
Fire threatens township
Heat, wind hazards
300 fight new fire near Mount Egerton
500 GET FIRE UNDER CHECK
Widespread bushfires: More feared
TOTAL FIRE BAN DAY
Age
FIRE TOLL

The Demon—Fire.

DEATH AND DESTRUCTION

"Nine Die in Hotel Fire. Woman Bursts Into Flames" . . . "Nine Burnt to Death in Bushfire Horror" . . . "Death Fire Out. C.I.B. Called In" . . . "Sheep Incinerated in Bushfire Terror". True, these are only newspaper headlines but they dramatically emphasize the fear, the horror, the devastation and the great personal tragedy that is an aftermath of uncontrolled fire.

Fire has always been a good servant to mankind but if it becomes the master it transforms itself into a raging monster.

Every year in the State of Victoria, men, women and children perish in the flames of fire, leaving behind sorrow, heartbreak and scars which time takes a very long while to heal. Most of these fires could have been prevented if people were more conscious of the need for fire prevention.

Most Victorians over the age of 40 still have vivid memories of the appalling 1939 bushfires when the State was alight almost from end to end. The tragic loss of 71 lives and the shocking devastation wrought over three-quarters of the State is still imprinted indelibly in their minds. Even to-day, gaunt timber giants stand like bleached skeletons against a backdrop of a cloud-flecked sky to bear mute and grim testimony to the ravages of those fires.

The 1939 inferno should have acted as a warning to every person in Victoria of the need to take every possible care to prevent an outbreak of fire, yet since that date the State has experienced many terrible conflagrations. Grim reminders are still to be seen of recent bushfire havoc in the form of charred and decaying homesteads—

blackened forest areas and the headstones on the graves of those who perished in the flames.

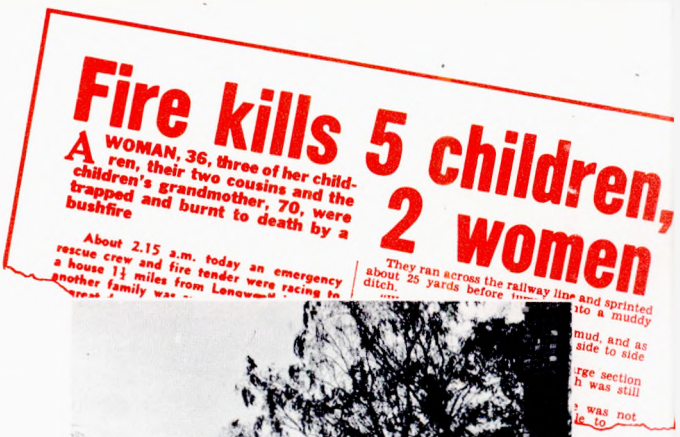
It is not hard to imagine the agony of mind, the anguish and the helplessness experienced by a farmer as he is forced to stand by and watch his home, his stock or his crop engulfed in a fire which he and his friends and neighbours have been powerless to stop—a lifetime's work obliterated in a matter of minutes.

And what of the mental torture and heartbreaking distress facing a distraught father and mother when they are informed that their home . . . all their possessions . . . have been destroyed by fire and that the two young children they left asleep in the house were burnt alive in the blaze. Great tragedies of this nature are not a figment of the imagination nor the fictional invention of a writer's pen . . . the bare cruel fact is that they happened and could happen again.

". . . blackened forest areas."

While all rural fires cannot be prevented—nature takes a hand in starting some of them by lightning or other natural causes—most of them are started by man, while the majority of domestic fires are caused through carelessness or ignorance on the part of property owners.

Victoria, because of its climatic conditions . . . good rainfall, hot and dry summers . . . is fire prone and in


Fire kills 5 children, 2 women

A WOMAN, 36, three of her children, their two cousins and the children's grandmother, 70, were trapped and burnt to death by a bushfire

About 2.15 a.m. today an emergency rescue crew and fire tender were racing to a house 1½ miles from Longwood

They ran across the railway line and sprinted about 25 yards before into a muddy ditch.

mud, and as side to side

rge section h was still

was not le to

"Grim reminders . . ."

periods of extreme heat and dryness can become a powder keg ready to explode from the smallest spark. Its fertile land readily generates lush undergrowth and dense timber which thrives during the autumn, winter and spring months. But when temperatures begin to rise and the rich green of the grass slowly begins to turn to yellow and brown, nature hoists its own danger signals about the acute fire risk and every person living in the State should take heed of nature's warning.

It is said that a fool is soon parted from his money. This saying put in another way can be aptly applied to every person who fails to recognize the fire danger signs during the State's inflammable summer . . . "A fool is easily parted from his life and his home." Anyone who ignores warnings about the fire risk during acute danger periods must be a fool, and a selfish, ignorant, stubborn one at that. Harsh words, maybe, but when the lives and property of others are endangered, abuse and ridicule are the only words some people seem to understand.

Economic Wastage

Apart from the tragic loss of life and injury—often hideous disfigurement for life—fire causes colossal economic wastage. A factory destroyed by fire is out of production for months and sometimes years so that capital cost of replacement is not the only thing that must be taken into account. There is the placement of the employees and their wages to be considered, the insurance that is paid for the damage, the loss of production, and so on. Similarly, if a farm is burnt out, the farmer must rebuild his homestead, restock his property and rejuvenate his pastures, all at a substantial cost and generally at far greater expense than his original outlay.

Fire authorities have become alarmed and rightly so at the rising cost of fire damage each year. It is conservatively estimated that fire does 1,700,000 dollars a week damage or nearly 90 million dollars a year in Australia. On the human side, an average of four people each week or over 200 each year are burnt to death. It is a terrible price to pay for carelessness, ignorance, stupidity and complacency. So it is no wonder that the authorities are concerned at the apparent public indifference to the ever-present risk of fire both in the metropolitan and country areas.

Beyond the Line of Duty

Throughout the State, various authorities maintain efficient fire fighting organizations —professional and volunteer—and over the years there have been many unsung heroes within their ranks . . . men who have experienced untold fire terror but who have always done that little extra bit either to snatch a life from the flames or to save some unfortunate property owner's home. These men know the horror that can accompany a widespread conflagration so they

NINE DIE IN HOTEL FIRE
WOMAN "BURST INTO FLAMES," SAYS GUEST
Australian Associated Press
NEW YORK, Thur. — Guests — with their hair and clothes alight from a hotel fire which claimed nine victims early today.
ge was in the ancient Carlton . Paul, in Minnesota.
Factory blaze: 11 flee
WORKERS in a paint factory in South Melbourne ran for their lives when fire broke out in a storeroom late yesterday afternoon.
Four-gallon drums of paint exploded and inflammable material in the storeroom sent flames shooting 20ft. above the factory in Wells St., South Melbourne.
The fire could be seen from most parts of the city.

can be excused for wearing worried frowns when they see the temperature creeping up towards the century mark—the hot, thirsty winds blowing in from the north to rob the soil and undergrowth of every vestige of moisture—and the fire peril nearing flash point. They will risk their lives and carry out their allotted task often beyond the line of duty . . . but it should not be necessary for them to do so if the public co-operated to observe the fire-prevention rules which have been carefully prepared in the interests of every person in every walk of life.

The Country Fire Authority, the largest fire fighting organization in the State, is responsible for fire prevention and control of most of Victoria's country and rural areas. It maintains an army of volunteer fire fighters from all walks of life who are on call to handle outbreaks in areas outside the metropolitan area of Melbourne.

The Forests Commission maintains an efficient and comprehensive fire fighting service to deal with outbreaks in State forests, National Parks and private property within 1 mile of some State forests and National Parks.

The Metropolitan Fire Brigade, consisting of professional firemen, is responsible for the protection against fire of life and property in the metropolitan area of Melbourne. It is equipped with the latest fire fighting appliances to tackle all types of fires.

All the State's fire fighting services are continually modernizing and expanding their equipment and experimenting with various fire fighting methods and their fire fighters continually receive training to keep them up to a very high standard. This is done for your protection.

Every year these organizations, and the thousands of men in their charge, appeal and plead to the general public to become fire-prevention conscious. It is not a hollow bureaucratic call—but a sincere entreaty to every citizen of Victoria to co-operate with them so that the appalling loss of human life, natural resources, stock and property which has been an ugly feature of the State's summer periods in the past can be greatly reduced in the future.

There is no excuse for carelessness, ignorance, stubbornness and stupidity where fire risks are concerned. Every citizen of Victoria has a responsibility to his family, his friends, his neighbours and his fellow beings to ensure that the incidence of fire is kept to the absolute minimum.

In the following pages you will be told how to carry out fire-protection measures—how to handle fire if it should break out—and what to do to protect your own life and the lives of others in the event of fire.

Do not treat the contents of this book lightly. Your willingness to observe the carefully prepared rules set out in the following pages will pay dividends and can mean the difference between life and death.

PREVENTION

A good servant
But a fiendish master

"Ready for fire peril"
WITHOUT rain, mid - January would be "critical" for fires, the new chairman of the Country Fire Authority, Mr Richard Eason, warned yesterday.
No fire in open today: First summer ban
A TOTAL ban on fires in the open came into force throughout the State at midnight following a forecast of near-century heat and northerly winds.

The danger of fire is always present . . . in the suburban home . . . in the farm house and farm shed. Fires have caused havoc and destruction in the autumn, winter, spring and summer with the summer months naturally being the most conducive to fire outbreak because of the high temperatures and dry atmosphere. But if householders take simple precautions the chances of destructive fire breaking out will greatly diminish.

Here is how the suburban or country householder can help to prevent an outbreak of fire in his home or on his block of land—

ALL THE YEAR ROUND :—

If you smoke, always make sure that you butt your cigarette in an ashtray if inside the house, or grind the finished butt into the ground if you are working outside. Don't smoke close to inflammable liquids or wood shavings, while smoking in bed is a bad and dangerous habit which has resulted in many people being burnt to death.

Dispose of all combustible refuse by public collection if you can. If you can't, burn it as soon as possible in an incinerator with a spark arrester. Open drums which have ill-fitting lids can be a great fire hazard. Make sure the incinerator is in a safe place.

Don't overload the electrical wiring circuit of your home, and if you have any doubts as to whether your circuit can handle the number of appliances you use consult your local electricity supply authority.

Don't try to replace damaged wire yourself . . . this is a job for a trained electrician. Any suspect wiring or power point should be electrically remedied immediately.

Don't use electrical appliances with damaged insulation or frayed cords. Cords in door jambs or under rugs, cords heated by radiators and pipes, and cords punctured by tacks or other fasteners are liable to insulation failures and could lead to an outbreak of fire.

Don't leave the electric iron switched on when you answer the telephone or the door. You might forget about it and it could overheat near combustible material and set it on fire. Always keep the iron unplugged when not in use.

Keep electric motors well oiled and clean and they will be less likely to overheat and burst into flames.

Don't allow lint to collect in the filter and on the exhaust of clothes driers, around the interior of the drier and on the electrical equipment.

Don't put foam rubber products in driers as they may heat spontaneously and ignite with forced drying.

Make sure that children and combustible materials are kept away from exposed radiators. It is best to have a good safety guard on the radiator front.

Don't allow children to play with matches, either inside or outside the house.

Don't leave an open hearth fire unattended without placing a suitable spark screen in front of it and DON'T LEAVE CHILDREN ALONE IN A HOUSE WITH ANY FORM OF HEATING APPLIANCE ON.

Don't store unnecessary quantities of inflammable liquids—petrol, kerosene,

cleaning agents, &c.—in, under or near the house or in the garage, and NEVER use them near a naked flame. Always keep the containers well sealed. Clean up any spillage by washing down with water or a neutralizing agent.

SUMMER FIRE RESTRICTIONS

Summer is the really dangerous period of the year when every Victorian has an added responsibility to prevent outbreaks of fire.

Each year the Country Fire Authority declares "Fire Danger Periods" and the Forests Commission "Prohibited Periods", during which there are restrictions on the lighting of fires in the open air in country areas.

These "restricted periods" vary in length, depending on locality and seasonal conditions but normally run from late November to early April.

During these periods it becomes an offence to light fires in the open without observing certain precautions while there are also penalties for the careless dropping of lighted cigarettes and matches in the open countryside.

On certain days when the fire danger is extremely high, the lighting of fires in the open may be totally prohibited.

ALWAYS WATCH FOR THIS WARNING—TOTAL FIRE BAN TO-DAY

When this warning is given over the Radio, Television and in the press—THE LIGHTING OF ANY FIRE OR ALLOWING ANY FIRE TO REMAIN ALIGHT IN THE OPEN AIR IS STRICTLY FORBIDDEN.

A Total Fire Ban usually applies to the whole State, including forest, country and metropolitan areas. The ban includes incinerators, barbecues, out-door cooking appliances of all types including L.P. gas appliances and camp and picnic fires, and burning off for which a permit has previously been obtained.

On other days when summer fire restrictions are in force you MUST NOT—

—Throw or drop a lighted cigarette, cigar, tobacco, match or other burning substance on to the ground.

—Light a picnic fire unless—

- ★ it is lit in a properly constructed fire-place or a trench at least 18 inches deep;
- ★ it is not closer than 25 feet to any log or stump;
- ★ the area around the fire-place is completely cleared of all inflammable material within a radius of 10 feet, and the space above this area is also clear.

The fire must never be left unattended. Completely extinguish it before leaving.

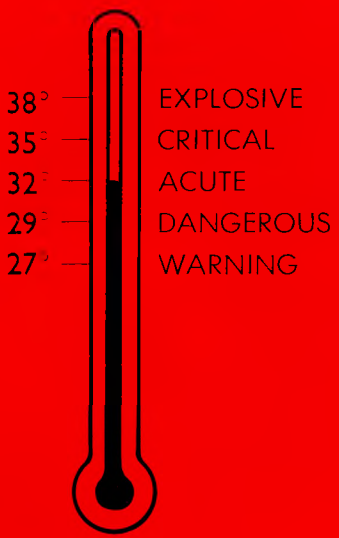
—Burn off any grass, weeds or undergrowth around your home without a written permit. The local fire brigade if requested may do the job for you and charge for the work.

—Use welding equipment except as is prescribed.

In certain districts—

On land within 1 mile of a State Forest or National Park you cannot light a fire, with the exception of a camp fire and incinerator, during a "Prohibited Period" unless you obtain a permit from a Forest Officer. You cannot light a fire other than a camp fire or incinerator IN a forest or national park at any time of the year without a Forest Officer's permit.

Incinerators may not be lit if there is more than a light breeze blowing. Inflammable material within 10 feet must have been removed. The fire must be restricted to the limits of the incinerator, adequate water must be on hand, and the fire must not be left unattended. The fire must be extinguished before being left, or on the request of a Forest Officer or policeman.



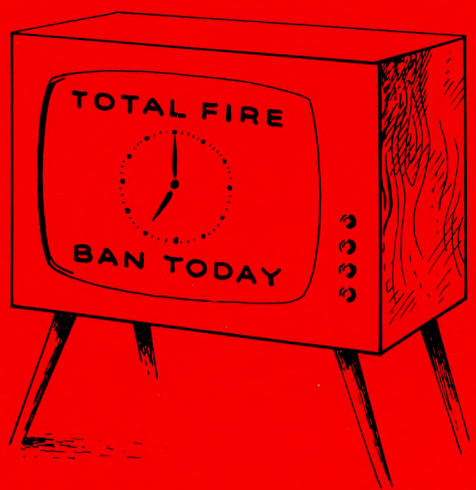
When the temperature begins to rise . . .

STOP PRESS

Total fire ban today

Watch for this notice in the newspapers . . .

TOTAL FIRE BAN MEANS THAT NO ONE SHALL LIGHT A FIRE OF ANY KIND OUT OF DOORS *ANYWHERE*



or listen to the news on the radio . . . or watch the news on television

CAMP FIRES AND FIRES IN INCINERATORS ARE ABSOLUTELY PROHIBITED ON TOTAL FIRE BAN DAYS.

BEWARE FAULTY MACHINERY & VEHICLES

Faulty farm machinery and motor vehicles can cause fires just as easily as a cigarette or a lighted match. The farmer therefore must take every precaution to ensure that every item of equipment on his farm which generates heat in one form or another is in good order and is not likely to ignite any inflammable substance.

He must—

- ★ See that the engine of his tractor or other farm machine is free from any mechanical defect which might cause a fire.
- ★ Make sure that the engine is fitted with an efficient spark arrester.
- ★ Carry on his tractor an efficient knapsack pattern water spray pump ready for use. A chemical fire extinguisher CANNOT be carried as an alternative.
- ★ Have any motor car or truck driven through grass or other vegetation properly equipped with an efficient silencing device.

Safe machinery reduces crop losses.

For safety's sake the farmer should make the following maintenance checks periodically during the summer months :—

- ★ Keep the spark arrester CLEANED and in good order.
- ★ Check the exhaust system for EMISSION OF SPARKS.
- ★ Keep machinery CLEANED of oil and grease.
- ★ REMOVE DRY GRASS from the machine, particularly the exhaust system.
- ★ REGULARLY CHECK that the knapsack spray pump is in working order.
- ★ Inspect fuel lines and tank daily for LEAKS.
- ★ LUBRICATE machinery regularly—prevent overheating of bearings and other parts ;

and always carry out the following good practices :—

- ★ ALWAYS CARRY the knapsack on the machine when it is in the field.
- ★ When working machinery, glance behind now and then to check for fire.
- ★ DO NOT carry drums of fuel on tractors. Vibration may cause leaks.
- ★ NEVER refuel any machine while the engine is running.
- ★ Keep a suitable fire extinguisher handy while refuelling.

Be prepared.

PROTECTION

A fool is complacent

A wise man takes precautions

PROTECT YOUR LIVELIHOOD

Firebreaks Essential

Firebreaks are an essential and vital feature of rural fire protection and the farmer should endeavour to complete this important work before the fire season starts. Breaks can be prepared in several ways :—

Ploughing :

Winter or very early in the spring before the grass begins to grow is the best time to plough a break, the ground being subsequently worked with a set of disc harrows just before the fire season. The last working must leave a clean face or furrow on the side nearest to that to be burnt or from which fire may be expected to come.

When a break is ploughed too early and left unworked, grass will grow from under the sod.

Much the same effect is produced if ploughing is delayed until the grass is long. Once alight, this grass may smoulder unnoticed, flaring up later when there is no one in attendance.

Excellent firebreaks can be prepared with rotary hoes. Care should be taken to prevent the creation of a hazard by chopping long grass into a shallow working.

Mowing :

Mowing is an economical method where it can be used. The cut grass must be removed and can be utilized as fodder. Grass is best cut after it has turned to seed but before becoming dry.

Grazing :

Grazing is more economical than mowing. Close grazing in the home paddocks is most effective for homestead protection. Grazing along roadsides using electric or temporary fences utilizes valuable fodder as well as reducing fire hazards.

Green Summer Crops :

Potato, rape or lucerne crops, amongst others, are excellent firebreaks if strategically placed.

Burning :

The burning of firebreaks should be undertaken with the greatest of care. Weather conditions and the likelihood of the fire spreading out of control should be watched carefully. Burning should take place only between prepared ploughed or rotary-hoed strips.

Plan Your Firebreaks :

To be effective a firebreak system must be planned, so :—

★ Place major breaks on all of the northern and western boundaries of the

Assets are worth protecting.

Irrigated areas give protection.

Grazing is more economical than mowing.

A green summer crop (chou mollier) used as a major perimeter firebreak.

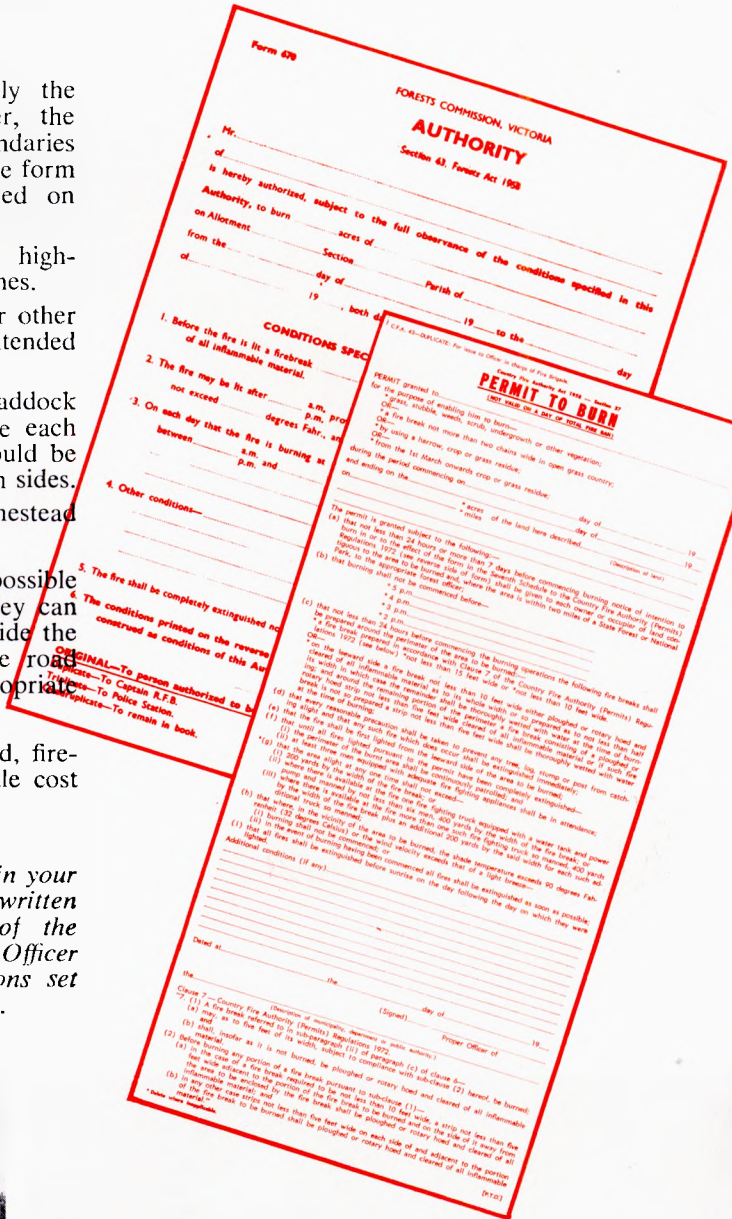
whole property where normally the greater danger lies. However, the eastern and southern boundaries should not be neglected and some form of firebreak should be provided on these sides.

- ★ Provide protection adjacent to highways, main roads and railway lines.
- ★ Make use of any watercourse or other natural break which can be extended in width or length.
- ★ Place subsidiary breaks along paddock fence lines, at least 6 feet wide each side of the fence. Furrows should be turned towards the fence on both sides.
- ★ Completely surround the homestead area with firebreaks.

Make major breaks as wide as possible and not less than half a chain. They can often be placed on the roadside outside the property between the fence and the road pavement if the consent of the appropriate authority is obtained.

Once properly planned and formed, firebreaks are easily re-formed with little cost in labour and time.

When fire restrictions are in force in your district, don't forget you must get a written permit from the Proper Officer of the municipality or the local Forest Officer if burning firebreaks. The conditions set out in the permit must be observed.


Form 670

FORESTS COMMISSION, VICTORIA

AUTHORITY

Section 43, Forests Act 1958

Mr. ..... of .....

is hereby authorized, subject to the full observance of the conditions specified in this Authority, to burn ..... acres of ..... on Allotment ..... Section ..... Parish of ..... from the ..... day of ..... 19 ..... to the ..... day of .....

CONDITIONS SPEC

1. Before the fire is lit a firebreak ... of all inflammable material.
2. The fire may be lit after ... not exceed ... a.m. p.m. ... degrees Fahr., ...
3. On each day that the fire is burning at ... between ... a.m. and ... p.m.
4. Other conditions—
5. The fire shall be completely extinguished ...
6. The conditions printed on the reverse ... construed as conditions of this Au...

ORIGINAL—To person authorized to b...
Triplicate—To Captain R.F.B.
Duplicate—To Police Station.
Triplicate—To remain in book.

C.F.A. Act—DUPLICATE. For issue by Officer in charge of Fire Brigade.

PERMIT TO BURN

(NOT VALID ON A DAY OF TOTAL FIRE BAN)

PERMIT granted to ..... for the purpose of enabling him to burn—

OR a fire break not more than two chains wide in open grass country;

OR by using a harrow, crop or grass residue,

OR from the 1st March onwards crop or grass residue,

during the period commencing on ..... and ending on the .....

on ..... * acres ..... day of ..... * miles ..... day of .....

The permit is granted subject to the following—

(a) that not less than 24 hours before commencing burning notice of intention to burn in or to the extent of the form in the Schedule to the Country Fire Authority (Permits) Regulations 1972 (see Section) "not less than 7 days" shall be given to each owner or occupier of land adjoining the area to be burned and where the area is within two miles of a State Forest or National Park to the appropriate forest officer.

(b) that burning shall not be commenced before—

* 9 a.m.
* 10 a.m.
* 11 a.m.
* 12 p.m.

(c) that not less than 24 hours before commencing the burning operations the following fire breaks shall be prepared around the perimeter of the area to be burned—

On the leeward side a fire break ... not less than 15 feet wide or two less than 10 feet wide, cleared of all inflammable material so that no part of the remainder shall be within one chain of any part of its edge, and within such fire break a strip not less than 10 feet wide shall be thoroughly cultivated or prepared as a fire break; and

On the windward side a fire break not less than 10 feet wide either ploughed or rotary hoed and cleared of all inflammable material so that no part of the remainder shall be within one chain of any part of its edge, and within such fire break a strip not less than 10 feet wide shall be thoroughly cultivated or prepared as a fire break; and

On the remaining sides a fire break not less than 10 feet wide either ploughed or rotary hoed and cleared of all inflammable material so that no part of the remainder shall be within one chain of any part of its edge, and within such fire break a strip not less than 10 feet wide shall be thoroughly cultivated or prepared as a fire break; and

Where the area to be burned is not less than one hundred acres in extent a fire break not less than 10 feet wide either ploughed or rotary hoed and cleared of all inflammable material shall be constructed through the area to be burned immediately ... slightly less than the remaining portion of the area to be burned; and

Where there is available not less than one fire ... stump or post from catching fire and that any such fire ... shall be thoroughly wetted with water ... that the fire shall be lighted from the downwind side of the area to be burned; and

(e) that not less than 24 hours before commencing the burning operations the following fire breaks shall be prepared around the perimeter of the area to be burned—

On the leeward side a fire break ... not less than 15 feet wide or two less than 10 feet wide, cleared of all inflammable material so that no part of the remainder shall be within one chain of any part of its edge, and within such fire break a strip not less than 10 feet wide shall be thoroughly cultivated or prepared as a fire break; and

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Where there is available not less than one fire ... stump or post from catching fire and that any such fire ... shall be thoroughly wetted with water ... that the fire shall be lighted from the downwind side of the area to be burned; and

(d) that adequate fire fighting appliances shall be in attendance—

(i) that there shall be supplied from the ... slightly less than the remaining portion of the area to be burned; and

(ii) at least one fire fighting truck equipped with a water tank and power pump shall be in attendance at the burning; and

(iii) 200 yards of hose shall be available for each fire fighting truck in attendance; and

(iv) there shall be available for the purpose of extinguishing any fire that may escape from the area to be burned—

(A) where there is available not less than one fire ... stump or post from catching fire and that any such fire ... shall be thoroughly wetted with water ... that the fire shall be lighted from the downwind side of the area to be burned; and

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(iii

Team work gets results.

BURNING OFF

Burning off is a cheap method of removing fire hazards or clearing land, but unless it is carried out with extreme caution and at the right time there is always a danger that the burning may get out of hand with costly results to the property owner and his neighbours. It is best to burn off as early as practicable and NOT WAIT UNTIL THE REALLY HOT WEATHER ARRIVES. In any case, once summer fire restrictions are in force, EVERY LANDHOLDER must obtain a permit to burn off from the appropriate municipal officer or forest officer. These permits set out strict conditions for the procedure to be adopted.

UNDER NO CIRCUMSTANCES CAN BURNING OFF BE CARRIED OUT ON A TOTAL FIRE BAN DAY even if a permit to burn off has already been obtained.

Should you burn off outside the summer restriction period it is most advisable to adopt the following safety measures :—

- ★ OBTAIN A WEATHER FORECAST, ESPECIALLY FOR WINDS, and do not start early in the day before weather conditions are settled.
- ★ Give at least 24 hours notice of your intention to burn to neighbours adjoining the area and inform the local fire brigade.
- ★ Prepare protective ploughed or rotary-hoed firebreaks before lighting up.
- ★ Protect trees, stumps and posts by chipping grass away and wetting down.
- ★ Do not attempt to burn more than can be controlled at any time with the man power and equipment available.
- ★ Burn downhill wherever practicable. Burning up a steep incline, even against the wind, is always dangerous.
- ★ Always light the fire first on the leeward side. Burning against the wind will give a slower and cleaner burn.

★ Do not burn off in a high wind. Use the wind to advantage but beware of sudden changes in velocity and direction.

★ Be careful with smoke obstructing roadways. Some form of traffic warning should be employed. Choose times when the wind will not blow smoke across the road.

★ Always make sure the fire is completely blacked out progressively for a depth of at least 2 chains into the burnt area. Constant patrolling is essential.

★ You must confine your fire to your property.

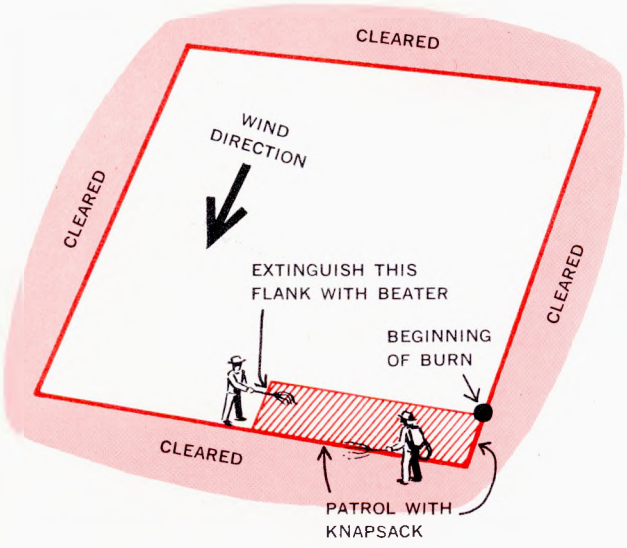
★ If your fire should escape immediately notify the nearest Brigade, Forest or Police Officer.

A Recommended Burning-off Technique for the Householder

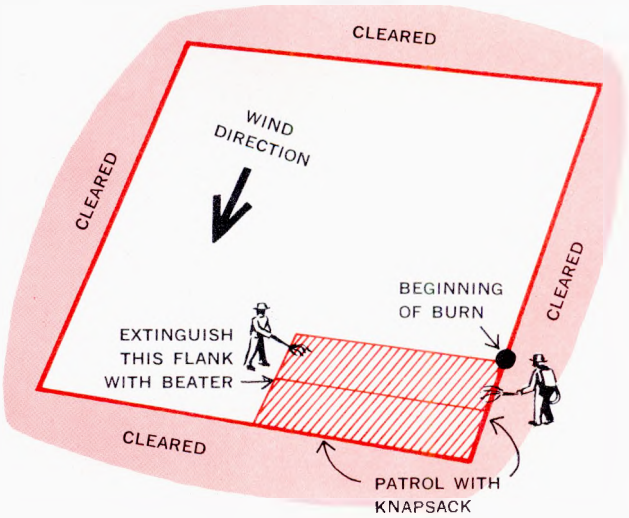
Strip burning is recommended to the private individual with limited man power and equipment. This method allows strict control of the area alight at any one time.

Procedure

1. Prepare chipped, ploughed or rotary-hoed firebreaks around area to be burnt.
2. Test burn a short strip 3 to 4 feet wide on the leeward side to observe conditions.



3. Decide whether it is safe to proceed with the burning.
4. After determining a safe size for each strip, based on the test strip, burn second strip in same fashion.



5. Continue strip burning in this fashion proceeding against the wind all the time so that no large area is burning at any one time.
6. When burn is completed or operations stopped patrol whole area for any hot spots. All fire must be completely extinguished.

Before you burn off DON'T FORGET TO ASK YOUR LOCAL FIRE BRIGADE OFFICER, FOREST OFFICER, POLICEMAN OR MUNICIPALITY WHETHER YOU NEED A PERMIT.

IN THE METROPOLITAN AREA ALWAYS SEEK ADVICE FROM THE NEAREST FIRE STATION OR MUNICIPAL OFFICE BEFORE YOU BURN OFF GRASS OR OTHER VEGETATION.

MOST IMPORTANT OF ALL—ON A DAY WHEN A TOTAL FIRE BAN HAS BEEN DECLARED ALL PERMITS FOR BURNING OFF OR LIGHTING OF OTHER FIRES ARE VOID.

REMEMBER YOUR LIVESTOCK

Exposure of animals to death or suffering in bush and grass fires is an act of cruelty which can be avoided, so provide a safe area for stock during a fire, and draw up a plan for mustering stock into the safe area during an emergency.

There are several kinds of safe areas which provide protection for sheep and cattle. They are—

- ★ Healthy crops of turnips, rape, choumoellier and similar fodders, whether irrigated or not.
- ★ Paddocks of well maintained irrigated lucerne—lucerne grows successfully in many different types of soil.
- ★ Well worked orchards.
- ★ Fallow paddocks.

Mown areas for silage or hay, especially when summer rains have produced a new green shoot, make good shelter, while areas of bare ground, green river frontages, shallow water, dry lakes, river beds or sheep camps are natural safe spots. Strategically planned permanent stockyards, dairies and shearing sheds provide shelter in an emergency.

The homestead should be the safest part of the property, and where practical, safe areas for livestock should be "built into" this general area. Plan summer crops near the homestead for general protection. Stock mustered in these areas on a bad fire risk day will be under observation.

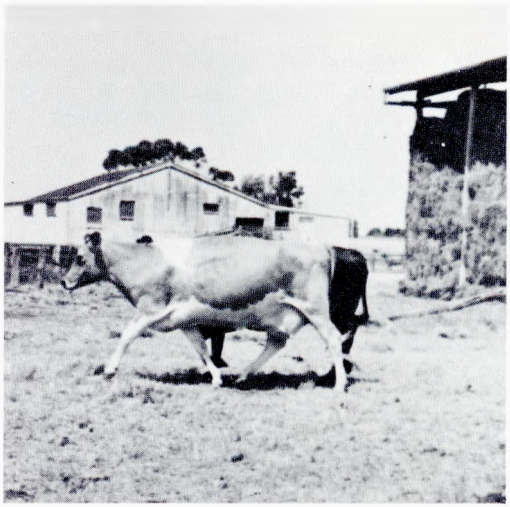
Emergency Yards

A safe plan to protect stock in the event of fire is the erection of emergency yards. The ground should be kept bare in and around the yards which should be built close to water and shade if possible. The yards should be big enough to hold the stock when boxed up.

Mustering of Stock

On bad fire risk days do not wait for a fire to start before mustering stock into safe areas. Do it early. Stock is difficult to move later in the day. Move the stock by the shortest possible route to a safe area. Sufficient gates in each paddock will enable speedy and easy handling.

Protect fodder reserves.



Plan grazing schedules so that as the fire danger increases during the summer, the stock population is progressively moved nearer to a safe area.

Watering

Don't forget that your stock will need water while in the safe area. Fire emergencies arise on the hottest, driest days of the year. Movable water troughs will probably be of great help.

Overhead irrigation pipes and sprinklers can be used to provide effective protection for stock.

PROTECT YOUR STOCK'S FOOD SUPPLY

Don't ignore protection of your stock's food supplies—fodder. Starving stock will not be much good to you if fire destroys all their food, so protective measures for fodder are just as important as protective measures for your property. Fodder reserves are all important to the livestock producer and the haystack, therefore, is of immense value.

Haystacks have been set alight by lightning, spontaneous combustion, burning off of surrounding grass, children playing with matches, heat engines worked at stack site and by grass or scrub wild fires.

Intelligent protection of haystacks from grass fires will also prevent the spread of a fire originating in a haystack.

When siting stacks, separate them from each other—ideally in separate paddocks, and on the south and east side of the homestead. Burning stacks to the north or west on a day of high fire risk could be a serious threat to the homestead.

Keep stacks well clear of buildings and trees and where possible build them near a dam or other water supply.

Surround the stack with a ploughed firebreak at least 15 feet wide. Mow 30 to 40 feet outside the ploughed break, or heavily graze the area using temporary fences. Alternatively, place stacks in green summer crops.

DON'T FORGET—

Imprisonment of sap and moisture in the stack will encourage spontaneous combustion, and that older stacks are less apt to ignite than new ones. (The danger period is usually up to three months after the stack is built.)

The passage of smoke through hay usually makes it unfit for fodder, so decide whether it is worth saving or should be allowed to burn out.

In large stacks, horizontal and vertical shafts will provide ventilation and cooling.

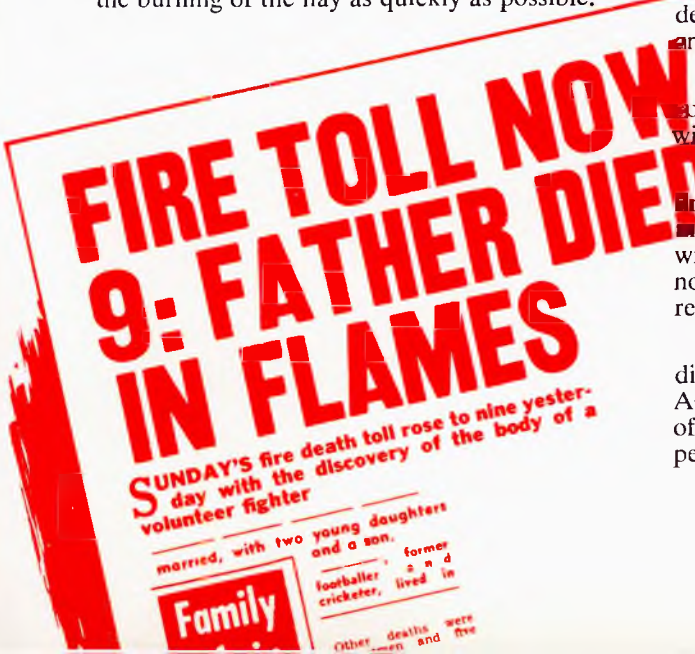
Testing for heat can be carried out in several ways and 160 degrees Fahrenheit is dangerous.

Keep haystacks off the ground and make sure they are protected from weather. If haysheds are walled, leave a wide space between the walls and the hay and "breaks" through the stack. This provides ventilation and side suppression.

When pulling a burning stack down, drag the hay well away to avoid congestion and more fires. Stacks can be quickly pulled down with a tractor and wire rope.

Make wide firebreaks around stacks and haysheds as a precaution against summer grass fires. Be careful that "burning off" fires do not spread to the stack.

If a stack catches fire during dry conditions and cannot be saved expedite the burning of the hay as quickly as possible.


FIRE TOLL NOW 9: FATHER DIED IN FLAMES

SUNDAY'S fire death toll rose to nine yesterday with the discovery of the body of a volunteer fighter

married, with two young daughters and a son.

, former footballer and cricketer, lived in

Family

Other deaths were men and five

OTHER PRECAUTIONS

Enclose the stack in a shed. This keeps sparks out. Grass around the shed should be kept short by grazing a 3-ft. strip around the shed. Where the stack is not enclosed in a shed, sheet the windward side. The use of skirt fencing allows grazing right up to the stack.

If operating an engine near a stack, point the exhaust away from the stack and prevent the dry material falling on any heated part of the engine.

Do not burn off around haystacks—plough, mow, graze or use one of the efficient soil sterilants now available.

Fire in a properly sited and protected haystack should not endanger buildings, crops or pastures.

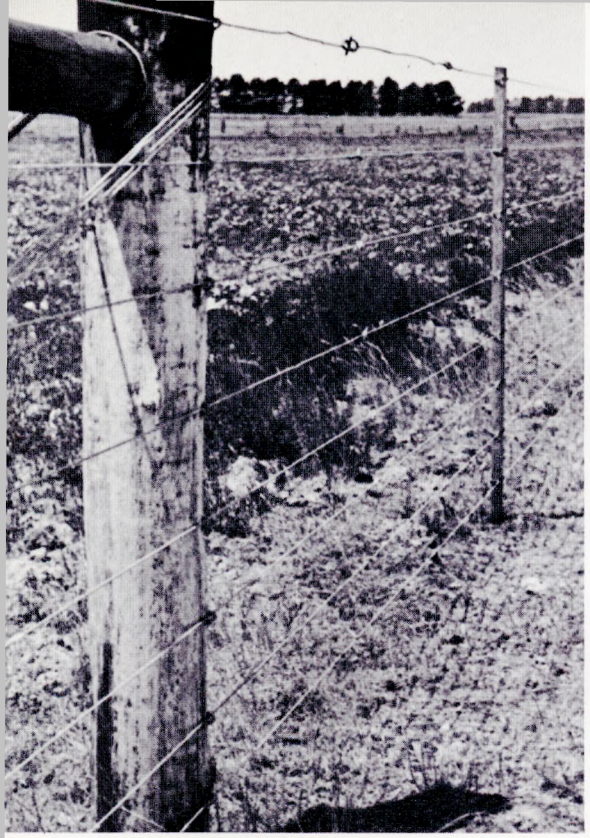
FENCING IS EXPENSIVE

Farm fencing is extremely vulnerable to damage by bushfires, and its replacement is expensive. On the average farm, one-third of the total cost of capital improvements is tied up with fencing. Costs per mile vary from $400–$700 or even more depending on the type of fencing and erection costs.

Attention to the materials used in construction and protection of the fence will minimize fencing losses.

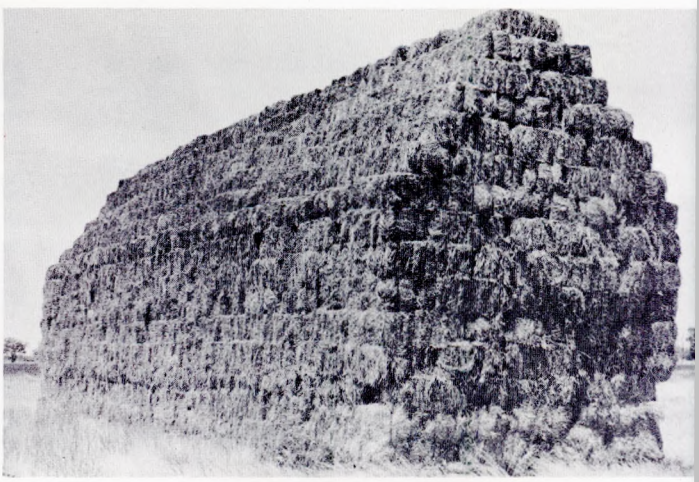
Improved quality concrete posts and iron droppers brought about the first improvement in available materials. Stapling of wires and the use of preserved pine posts now coming into popular use have also reduced the chances of heavy fence losses.

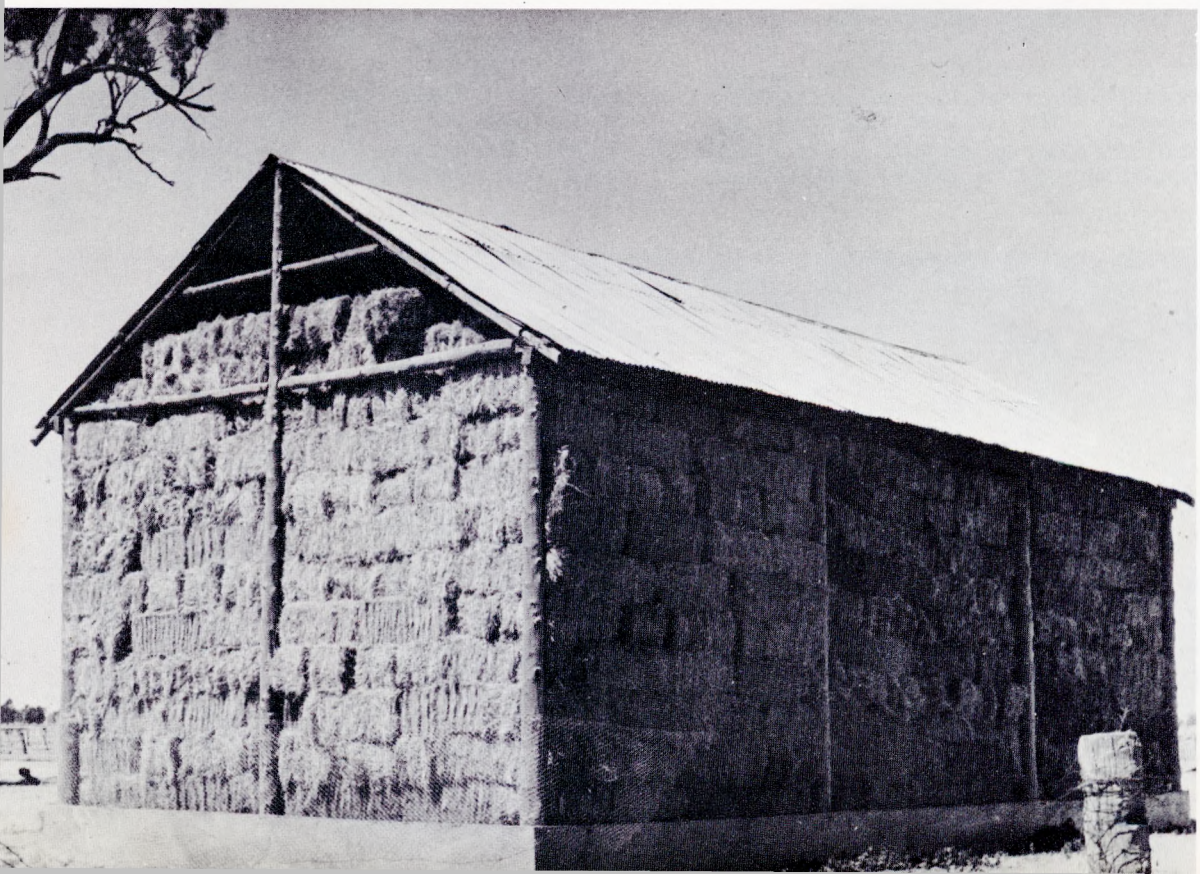
Good hardwood posts are becoming difficult to obtain and are expensive. As a result many inferior posts with a life of only ten years are being used on properties to-day. This period may even be



Staple wires to posts and droppers — clear fence lines.

Which of these is your haystack?





shorter if the posts are bored and the fence line is left unprotected from bushfires.

Irrespective of the materials used in construction, fences should be protected by removing excessive growth from the fence line itself. Fire, even if it does not destroy the fence, will cause a breakdown of the galvanizing on the wire, allowing rust to develop, thereby reducing the fence's useful life.

Cultivation, mowing and the use of chemicals along fence lines will help to reduce the chances of these losses.

Fence lines which are on stony, steep or inaccessible land present their own problems, but every effort should be made to prepare firebreaks along fence lines, especially the more important boundaries, to give protection to the fence itself as well as to the whole property.

WATER-THE BEST WEAPON AGAINST FIRE

There are many ways in which a fire can be extinguished—by chemicals—by foam—but by far the cheapest and most effective method is by water, so people who live in fire-prone areas should make sure they have adequate supplies of water handy. The better your supplies for domestic and farm use, the better your protection against fire. In planning your water supply or alterations to it, always keep fire fighting in mind.

At the Homestead

Collect water from every roof. Let none run to waste. *Do not* rely on one tank which could be accidentally emptied. With several tanks arrange for one to be permanently shut off from the main supply line during the summer months as a full reserve for home protection.

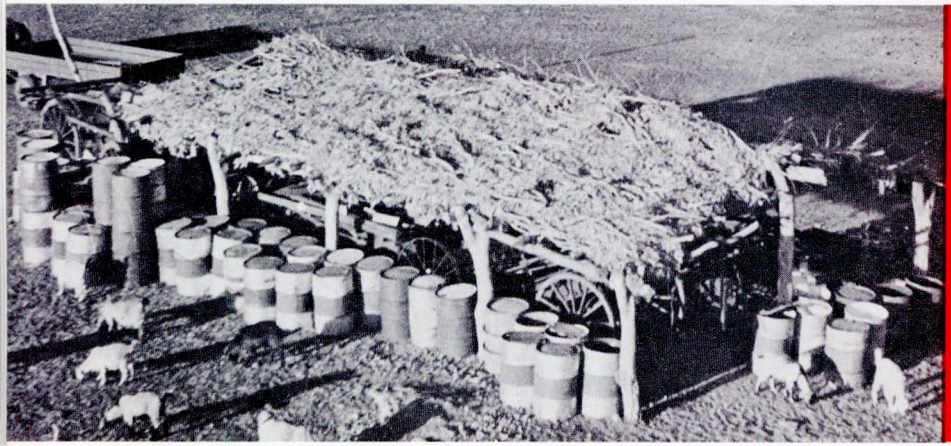
In a reticulated supply, provide an accessible large capacity filling point for fire-fighting purposes. A standpipe of ample dimensions will enable fire trucks to refill their tanks with a minimum loss of time.

With separate tanks at each building, keep access to outlets clear of obstructions. Provide large adequate outlets.

Standardize on taps and hose fittings so that your hose can be used on any tap.

Provide fully charged knapsacks at strategic points.

On bad fire risk days keep the garden hose attached to the tap. Where pressure is poor, a knapsack spray pump attached to the hose outlet will improve pressure.



Bad practice.

A properly bunded elevated petrol storage.

An ideal plan is to fit permanent sprays for wetting down the north and west sides of the house when fire approaches.

Do not rely too heavily on bores with windmills as they recover too slowly. Once the tank is empty it is of no further use for fire-fighting.

In the Field

- ★ Place water storages strategically throughout the property.
- ★ Provide maximum capacity rather than minimum.
- ★ Keep water storages in good order.
- ★ Assist fire fighters with well-defined tracks and direction indicators.

HIGHLY DANGEROUS

Most farms maintain bulk supplies of fuel for their motor vehicles and farm machinery and the highly inflammable nature of these fuels demands the most stringent safety precautions.

The safest place is to store them underground, but if this is not possible, they should be kept well clear of all other inflammable materials. If under cover, they should be kept in a well fire-proofed shed with all openings sealed.

INFLAMMABLE LIQUID STORAGES NEED PROTECTION FROM BUSH AND GRASS FIRES—FIRES IN STORAGES MUST BE PREVENTED FROM SPREADING TO BUSH OR GRASS.

Inflammable liquid storages must be not less than 50 feet from any other building.

In the open, elevate the tank, but put large storages underground if possible.

Provide for leakage. Locate storage on sandy or porous soil where possible. Always consider the slope of the land in relation to nearby buildings. A natural depression or artificial bund forms a protection against spillage and leakage.

Check with the Municipal Council for approval of your fuel storage site and obey the Regulations.

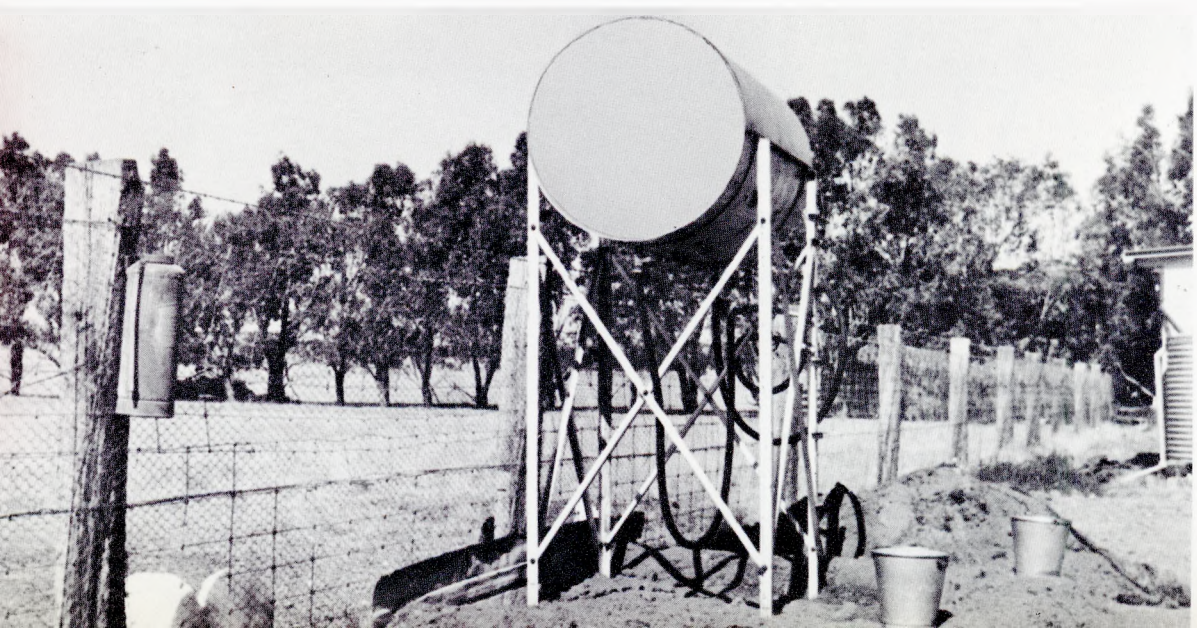
Remove all vegetation from the immediate vicinity of the storage and keep this area clear at all times.

Remember

Use every care when handling inflammable liquids.

BOTTLED GAS

Bottled gas, or to give it its technical term Liquified Petroleum Gas, is now widely used by country people, and from the fire danger point of view, the main



Keep spoutings clean.

Cover all ventilators with fine wire mesh.

A few wise precautions
could make all the difference.

feature of bottled gas is that it is usually fitted close to the premises. The safety valve, of course, should face away from the building.

On a bad fire risk day, the control valve at the cylinder should be kept closed when the gas is not being used. If the home is threatened by an approaching bush or grass fire, **make sure** this valve is closed.

Increasing heat will raise the pressure inside the cylinder until the safety valve opens. There is very little risk of the cylinder exploding.

The escaping gas may or may not ignite. The flame cannot normally be extinguished with water. Dry chemical type extinguishers will be found effective.

Usually, however, it is better to allow escaping gas to continue to burn, whilst cooling the cylinder with a water spray. A gas escape which is not ignited can generate a combustible mixture with air in the vicinity which may explode if later ignited, causing extensive damage. Ignition of such a combustible mixture is rendered less likely if the space is filled with very fine water spray.

If the fire is not in the vicinity of the portable cylinders, it is wise to disconnect and move them to a safe distance in this way:—

★ Close valve at top of both cylinders by turning handwheels clockwise.

★ Disconnect copper pigtails from the valve outlets by unscrewing at the valve outlet. Do not forget that the nut has a left hand thread and must be unscrewed by turning in a clockwise direction. In an emergency the copper pigtails may be severed by a blow from a sharp instrument.

★ Remove cylinders to a safe distance. It is important that cylinders be kept in an upright position.

If the cylinders cannot be reached or are too hot to touch, the danger may be reduced by spraying water continuously over them to keep the temperature down.

DON'T MAKE YOUR HOME A FIRE TRAP

Fire is a hungry creature and once it starts it is always searching for fuel to feed its insatiable appetite, so if it is starved of fuel it must surely die. The wise householder in the country knows this and takes the necessary steps to protect his home from fire.

He will:—

★ Keep all spoutings, valleys and downpipes clean.

★ Board up sub-floor spaces, ventilating with woven wire vents.

★ Fix wire screens on doors and windows.

★ Close up eaves or cover with fine wire mesh.

★ Cover all ventilators with fine wire mesh.

★ Repair all loose tiles and roofing sheets.

★ Keep trees and shrubs well clear of walls.

★ Keep the wood heap tidy. Locate it preferably south or east of the house. Isolate it with cleared ground.

★ Remove all inflammable rubbish.

★ Keep lawns and garden tidy and well watered.

★ Ideally top the fence surrounding the homestead with water pipe fitted with sprinkler heads.

★ Remove all long dry grass.

★ Chip away grass within 3 feet of the walls of sheds, telephone and electricity poles.

★ Keep the yard clean and tidy.

★ Plant fire resistant trees to deflect wind and protect the garden.

★ Plough a firebreak around the perimeter of the house paddock.

★ Make shelter belts inside the firebreak, around the perimeter of the house paddock. Keep shelter belts free of ground debris.

★ Graze, fallow, or mow the house paddock or plant green summer crops.

★ Have a readily accessible water supply.

CONTROL

Small fires can become raging infernos
Take prompt action to quell them

FIRES! AND IT'S THE WORST DAY OF THE SUMMER
VICTORIA today is facing its worst fire danger day of the season . . . the third declared day of total fire ban.
Temperatures in the 90s
forecast
Authorities warned last night
fire danger
ear when the Gippsland fire

BE PREPARED

When the temperature starts to climb and the wind from the north freshens and grows warmer with an increasing fire risk, it is a very good idea :—

NOT TO light fires in the open nor throw out any ashes.

TO—

See the incinerator is out.

Keep matches away from children.

Check that garden hoses are connected to taps.

Check your telephone to see it is working.

Stay about the house.

ON THE FARM

★ Muster stock to a safe area early in the day.

★ Do not work farm machinery in the field unless absolutely necessary.

★ Check all fire-fighting equipment.

★ Check all fire safety precautions.

★ Check fire drill with all members of the family.

★ Plan food supplies in case of emergency.

★ Have the First Aid Kit ready.

★ Have the proper clothing ready for any emergency.

★ If possible have someone within sound of the telephone and the radio.

Display the telephone numbers of your nearest Brigade Officer, Forest Officer and Police Officer near your phone.

Use this procedure to report a fire—

1. Give your name and address.
2. Say "I wish to report a fire". State whether fire is in a building, grass or forest.
3. Give location of fire as accurately and as clearly as possible.
4. Give any directions which would assist fire-fighters to reach the fire by the quickest route.
5. If necessary, offer to guide fire-fighters.

A TERRIFYING MONSTER

Fire, when it assumes massive proportions, becomes a terrifying menace which strikes fear into the hearts of men. However, if you are threatened by fire or fire breaks out on your property TRY NOT TO PANIC. It may be difficult but it could mean the saving of your life.

IMMEDIATELY CONTACT YOUR NEAREST FIRE BRIGADE.

WHAT TO DO IN CASE OF HOUSEHOLD FIRE CITY AND COUNTRY

Fires in Confined Spaces (behind skirting boards, under floors, in roofs, &c.)—

★ Find the hottest spot on the outside, to ensure that you will make the entry hole in a position from which you can reach the fire.

★ Have an extinguisher ready for immediate use. When the opening is made, the increased air supply may allow fire to spread rapidly.

★ Make the entry quickly with axe, bar or pick. Disregard minor damage to structure. A delay may allow the fire to get out of control.

Oven Fires

★ Turn off the oven. (In the case of a wood stove, quell or withdraw the fire.)

★ Concentrate on preventing the spread of fire and heat to other combustibles. Restrict the supply of air to the oven as much as possible. Any attempt to attack an oven fire is fraught with danger. Larger fires and serious burns often result. Keep the door shut and allow the fire to burn itself out.

Chimney Fires

★ Douse the fire in the grate.

★ Remove inflammable furnishings from near fireplace, and build a small mound of sand or sawdust around the hearth. Water can then be squirted up or down the chimney with a garden hose. The mound will prevent the water spreading from the hearth to damage carpets and furnishings.

Beware if you have to use a mirror to look up the chimney. Wear a gardening glove to prevent burns to the hand holding the mirror.

Clothing Fires

- ★ Lay the victim down to prevent flames spreading upwards towards the face.
- ★ Roll the victim in a blanket to smother the flames.
- ★ Call a doctor.

Electrical Appliance Fires

- ★ Switch off.
- ★ Remove plug, otherwise water may cause a short circuit.

Electrical Fittings

- ★ Switch off power.

FIRST CONSIDERATION—CONFINE THE FIRE. Damp down areas around, above and below to prevent the fire from breaking away.

WHEN THE FIRE IS OUT. Thoroughly check the surrounding area particularly above the fire to ensure that the fire has not spread.

What to do if Fire from Outside Sources Threatens Your Home

- ★ Fill every available receptacle with water and place around the house with tins provided to throw the water.
- ★ Connect the garden hose ready for use.
- ★ Block the downpipes and fill the spoutings with water, keeping the ladder handy for possible use later.
- ★ Wet the walls nearest the approaching fire.
- ★ Have knapsacks filled with water and other fire-fighting equipment ready for use.
- ★ Have wet bags and blankets ready for use.
- ★ Clothe everyone adequately for protection against radiated heat.
- ★ *On the approach of the fire, close all doors and windows tightly and remain inside the house near the door on the opposite side from which the fire approaches.*
- ★ Block gaps under external doors.
- ★ As soon as the fire has passed, open the door and emerge. This should be

on the side of the house from which the fire is now racing away.

★ Check all round the house for any fire from burning embers or sparks. If clear outside, check inside the roof.

★ Immediately attack any fire found. Do not panic. Good work at this stage will prevent destruction of the house.

★ If necessary use wet blankets to protect the whole family.

WARNING—It is extremely dangerous to attempt to drive a car through smoke and fire when you cannot see a definite path of escape. You should be safer at home.

WHAT YOU NEED

The wise landholder recognizes the importance of keeping handy, and in good order, basic appliances for fighting fires. These include—

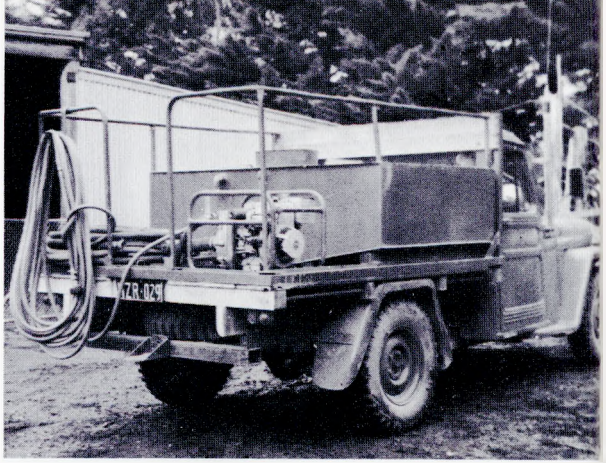
Hand Equipment

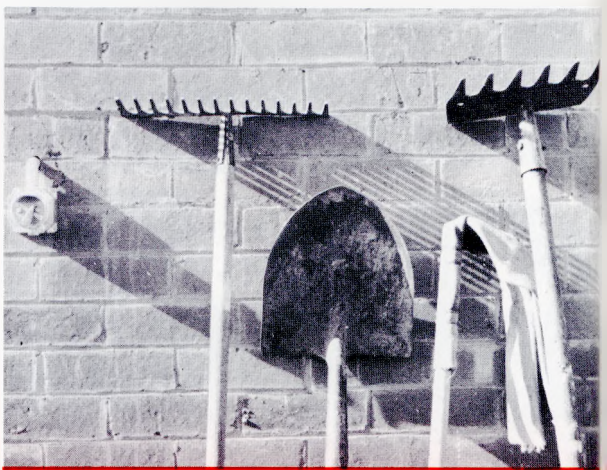
KNAPSACK SPRAY PUMP. When using this equipment the straight jet should be used only to knock out hotspots. The water should be aimed at the base of the fire and bounced off the ground in the shape of a fan. Follow up over the burnt area with nozzle adjusted to spray. Hot spots in trees can be reached with the straight jet. Water must be used economically. Spray it only on the fire, aiming *along* the fire's edge.

STIRRUP PUMP. A very useful piece of fire-fighting equipment. At least two buckets or drums of water should be kept on hand with every stirrup pump for immediate use.

CHEMICAL FIRE EXTINGUISHERS may be used in the home and farm buildings. Different types of extinguishers are available for fighting different types of fires. It is important that these be checked periodically to ensure that they are in good working order.

BEATER.—The fire beater may be thonged leather or canvas, a leather flap, a wet bag or green branch of a tree and

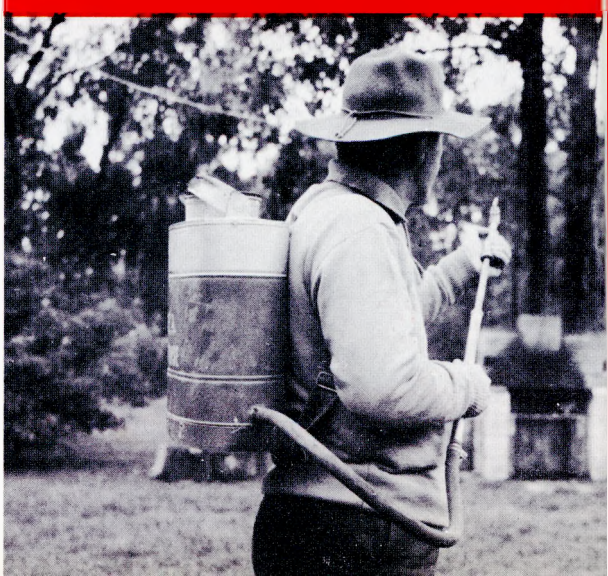




Tank and Power Pump.

Hand Tools — Rake, Shovel, Beater, Rakeho.

Knapsack Spray Pump.



should be used in a sweeping action towards the fire. A flapping action will spread the fire with a shower of sparks.

RAKE AND RAKEHO. For clearing fire lines and cleaning up the flank of a fire. Any burning material should be raked into the fire and unburnt fuel away from the fire. The rakeho is a dual-purpose tool for chipping and raking.

SHOVEL. Used for chipping or throwing earth and sand onto a fire. Throw earth or sand along the fire edge for best results.

Power Equipment

Tank and power pump fitted on a vehicle, a trailer or on a tank loading stand for quick mounting on a tray body vehicle.

The most suitable specifications are a 200–300 gallon tank with a 1½-in. outlet centrifugal pump powered by a 2½–4 h.p. engine. It should have a filling rate of 75 gallons per minute and a discharge rate of approximately 10 gallons per minute at 40 p.s.i. pressure and should be equipped with shut-off nozzles.

Ploughs, graders and rotary hoes will construct a very effective control line in grass country and should not be overlooked.

WHAT YOU SHOULD KNOW

Fire Attack

For a fire to start and continue burning, three things in balance are necessary, viz.:—

1. There must be fuel available to burn.
2. There must be sufficient heat to cause and maintain ignition.
3. There must be sufficient oxygen to sustain combustion.

This combination of fuel, heat and oxygen can be illustrated as a fire triangle—

Heavy equipment — bulldozed firebreak.

All fire-fighting methods aim at breaking this triangle in one way or another and basically involve—

(*a*) removing fuel from the path of the fire, or

(*b*) cooling the fuel below ignition temperature, or

(*c*) covering the fuel to cut it off from the oxygen supply.

While the amount of work necessary to achieve control of a fire will vary widely according to whether it is a grass, scrub or forest fire, the principles of fire fighting are the same in each case.

The individual cannot and is not expected to handle a major fire outbreak as this calls for the experience of trained fire fighters who are always on call.

The first aim is to attack the fire to *stop its spread.* When this is achieved, the fire *must be made safe* by mopping up and patrol, if all the work done previously is not to be wasted.

There are two methods of attacking a fire :—

Direct Attack

This involves working right on the fire edge which becomes the control line. The attack may consist of—

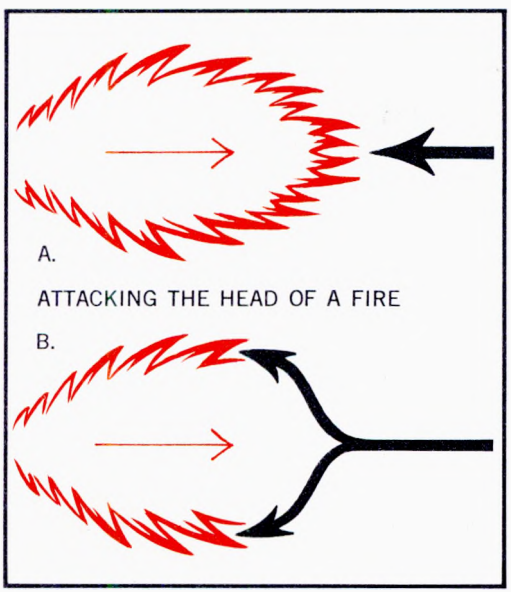
- ★ Applying water with hand or power equipment.
- ★ Beating with a beater, branch or wet bag.
- ★ Throwing sand or earth on the burning fuel.
- ★ Raking a " trail ", cleared of all fuel, immediately ahead of flames.
- ★ Creating a cleared " trail " by pushing the burning fuel inwards.

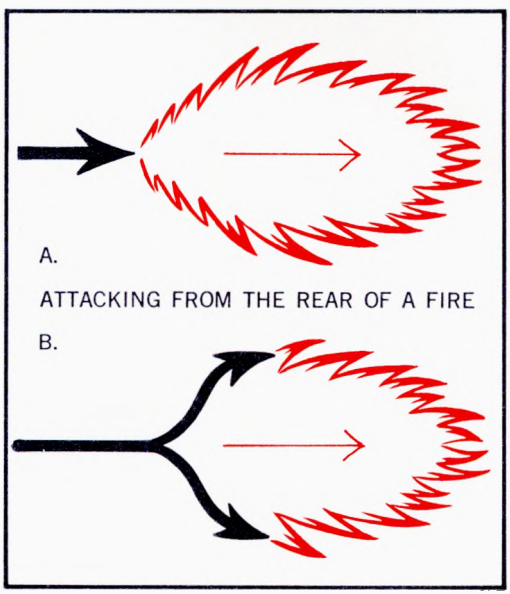
Direct attack is used on any occasion when fire fighters can work on the fire edge without serious discomfort. It is particularly applicable to a small fire or when a fire is burning quietly because of mild weather conditions or light fuel.

WARNING :

When dealing with heavier fuels such as burning logs, branches, stumps, heavy litter or duff, it is fatal to rely too heavily on either earth or water to completely extinguish the fire.

After control is obtained a mineral earth break should be constructed right round the fire.



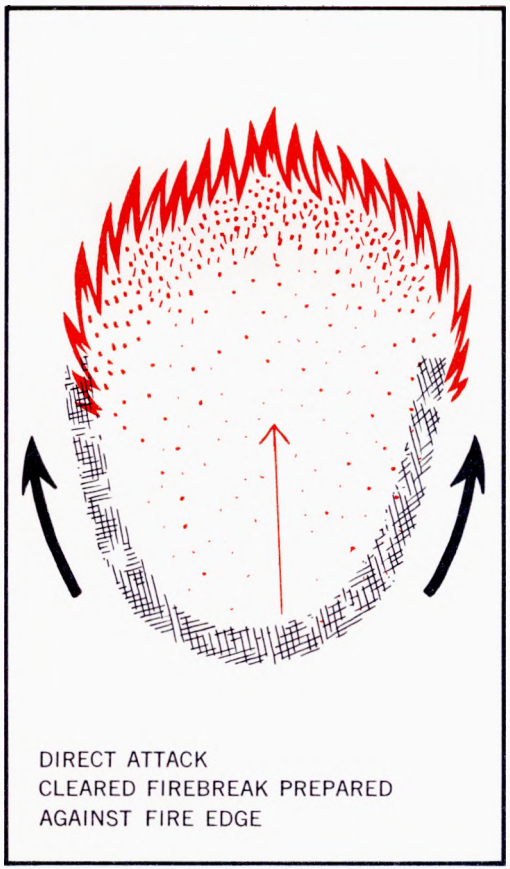


Indirect Attack

This involves use of backburning as the weapon of attack to confine the fire within a defined area bounded by existing or prepared control lines. In this method control lines may be a considerable distance ahead of the fire.

The method is used when the fire is large, fast moving, of high intensity or when the terrain or the men and equipment available will make it difficult to hold a control line close to the fire.

The large-scale backburning normally involved should only be attempted by experienced, trained personnel as successful backburning depends very much on a knowledge of the conditions necessary for safe conduct of the burning.



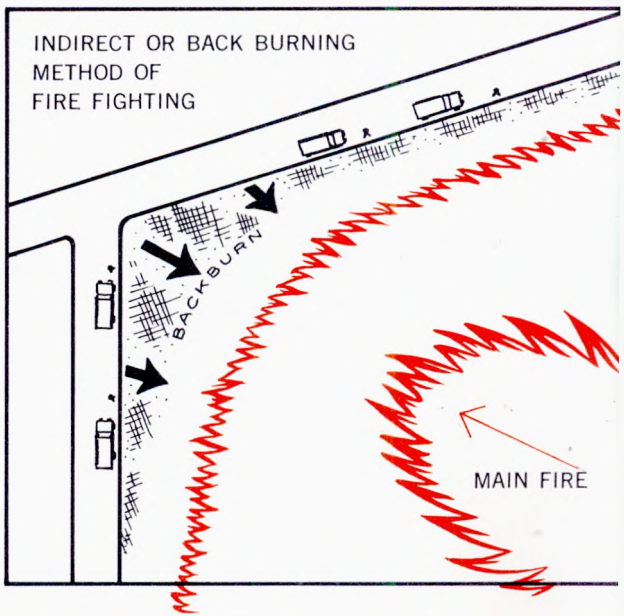
Always remember that no two fires behave exactly alike and the choice as to whether attack will be based entirely on the application of water or constructed control lines, or a combination of the two, will depend on fuel, terrain and the fire-fighting resources at hand.

If possible, attack should first be directed at stopping the head of the fire, where the rate of spread is greatest. If this is successful, work should extend from the head of the fire towards the rear, along the flanks.

Direct or indirect attack at the head of a faster moving fire should be attempted only when the whole of the fire can be seen and the chances of success are high or when the value of assets endangered justifies the attempt. Such an attack should preferably be undertaken by properly equipped, trained personnel.

The alternative and most frequently used tactic is to " pinch out " the fire by attacking from the rear and working along the flanks towards the head.

Whether working from the head or the rear of the fire in attacking the flanks, priority should be given to that flank which



Setting up a portable pump and hose lines at a forest dam constructed for fire-fighting purposes.

will become a " front " with normal wind change.

Mopping Up and Patrol

Even when the spread of the fire on all fronts has been stopped, and the flames have disappeared, the fire is not necessarily out and safe.

The good work done in stopping the spread must be followed up to ensure that the fire does not subsequently escape control.

Mopping up involves extinguishing all smouldering or burning material which could initiate a fresh outbreak.

On small fires it is possible to extinguish all burning material, but this is not practicable on large fires. Here action is confined to the removal or extinguishment of any smouldering or burning material near the fire edge which could blow, spot, roll or slide over the control line under the worst possible weather conditions.

Mopping up is gradually extended inwards, to provide a strip around the perimeter of the fire on which all smouldering or burning material has been extinguished, felled or otherwise made safe. The width of this " safe " strip will depend on circumstances and may extend to 2 chains, or even further.

Points to watch in mopping up, particularly at scrub or forest fires, are—

1. Deal first with the most likely sources of further outbreaks.
2. Move well in from the edge any burning material which can be thrown, pulled or carried. Use water for cooling, to permit handling.
3. Disperse any concentration of burning material near the control line to reduce heat.
4. Where there is no smoke, feel with the hands for hot spots in logs, stumps and trees.
5. Look for and extinguish smouldering dung, fence posts and roots burning underground. In heavy grass watch for lower layers which may be smouldering.
6. Fell any burning tree or snag which could fall, or cause sparks to blow across the control line. Alternatively construct an additional control line around the area where the tree will fall.
7. Where practicable cut away any burning bark on a tree, particularly round the burnt-out butt.
8. Turn logs uphill so that they cannot roll over the control line.
9. Where logs are too long or heavy to move, split them and water down, cut off the burning section or scrape off the charcoal and scatter to hasten cooling.
10. Cut through burning logs lying across the control line or extend the line around them.
11. Ensure that there is a continuous burnt strip within and against the whole of the control line. Burn out unburnt areas inside the control line.
12. On slopes trench below burning logs to trap rolling coals.

Mopping up a hot spot.

SURVIVAL

Keep your head
And you'll keep your life

Seven trapped near car
EIGHT people died in country fires yesterday.
Two women and five children, all relatives were trapped and burnt to death
Six of the bodies were found beside a burnt-out station wagon that had crashed into a tree.
The seventh body, that of a boy aged 12, was found about 250 yards away. Apparently the boy ran, after the others were overcome by smoke.
A man aged 70 collapsed and died in a fire-ravaged pad-
dock

YOU'LL BE SAFE AND SURVIVE IF . . .

Panic and ignorance are the main causes of death from fire. If you are caught in a fire, DON'T PANIC ; follow the basic rules of safety.

SAFETY RULES WHEN FIGHTING FIRES

To Avoid Injury

Protect yourself from radiated heat by wearing adequate and proper clothing.

Carry tools at the hip, not over the shoulder, and keep clear of others using tools.

Don't jump on to or off a moving vehicle. Sit when travelling on vehicles—when driving, remember your passengers. Avoid travelling on bulldozers.

In dense smoke keep windows wound up, and headlights burning—toot horn occasionally.

Watch for loose limbs hanging in trees, particularly in windy conditions. Avoid working on trees leaning into others.

Beware of falling trees—particularly in dead standing timber—dead trees give no warning when falling.

Watch for rolling logs.

Protect your lungs by holding a wet handkerchief or pad over the nose and mouth.

To Avoid Dangerous Situations

Park vehicles so that they are facing in the direction of the escape route and not blocking other parked vehicles. Wind the windows up, leave the ignition key in place. Allow sufficient room for other vehicles to pass.

In the vicinity of power lines take care that water does not make contact with them.

Be very careful with fences near power lines in case a fallen line has made them " live ".

Stay on the edge of the fire. Burnt country is safer than unburnt country.

Know where your companions are.

If forced to retreat from a fire move downhill and try and work your way to the edge and rear of the fire front.

Be careful when travelling a road which the fire has crossed. You could be trapped by fallen trees or other tongues of the fire.

Rules for Survival—when flames have already cut off your escape route—

Don't Panic. Panic seriously drains nervous and physical energy and clouds the judgment.

Run only when absolutely necessary.

Use any and every means that will shield you from radiated heat.

Radiated Heat is the Killer. Get into, under or behind any solid material which will prevent heat rays reaching the body.

Avoid sheltering in overhead water tanks if they are in any way exposed to the heat of the fire.

Limit the breathing rate when smoke is dense. Before filling the lungs wait for the small pockets of fresh air which usually

Do not drive through smoke unless you can see a definite path of escape.

Adequate clothing protects from radiated heat.

First-aid near the fire front.

arrive at frequent intervals. The air nearest to the ground is freshest and coolest.

Do not delay in front of the fire if it is necessary to run through the flame front to safety. Cover exposed skin as best you can. Take some quick deep breaths and move briskly through on to burnt ground. Choose the path least obstructed by dense growth, logs or uneven ground.

Do not enter flames more than 5 feet high, or more than 30 feet deep. (Most fatalities have occurred when men have attempted to go through such severe flame fronts.)

Lie as low as possible in the chosen shelter. Cover the body with any material available including dirt or sand. If you are inside a vehicle, close the windows, get under the dashboard. If there is not enough room inside get under or behind the vehicle and cover yourself.

FOR THE HOUSEHOLDER

In a house close doors and windows—stay on the side away from the approaching fire. Even if your home catches fire, by the time you are forced to vacate it, the main fire will have passed and you will be able to move out on to burnt ground. Few lives have been lost inside homes in bush-fires. It is dangerous to drive a car through smoke and fire when you cannot see a definite path of escape.

WHAT TO WEAR AT A FIRE

Protection from radiated heat is essential. The skin can be badly burned even if a person is some distance away from the actual flames.

Proper clothing will protect the arms, legs and head from burning debris and flying sparks in the air.

As much as possible of the bare skin should be covered. Wear stout leather boots, full length trousers, a woollen sweater closed at the neck and with full length arms and wide brimmed hat or helmet.

Do not wear clothing made from synthetic materials which are highly inflammable and which melt in the heat causing severe and complicated burns.

Woollen materials are least susceptible to burning. Wool will not flare like other material and is always to be preferred.

If fire threatens your home, see that your wife and your children, especially girls whose normal clothing is usually of an inflammable nature, are suitably clothed to protect them from radiated heat. It may save their lives and certainly can save them from burns.

FIRST AID

A knowledge of First Aid is always useful in the home, where many kinds of accidents may occur. When fire threatens the following ailments may need attention :—

Asphyxiation (Overcome by Smoke)

The symptoms are unconsciousness, blue lips and breathing stopped. Get the victim to fresh air and apply artificial respiration.

Burns

Cover with a clean dry sterile dressing or clean linen to exclude air. Do not remove burned clothing or break blisters. Never attempt to clean a burn. It is already sterilized by the heat which caused it. Keep it clean. Treat for shock.

Heat Exhaustion

The symptoms are pale face, cold clammy skin, shallow breathing and weak pulse. Lower the head, keep warm and give fluids, rubbing hands and feet. Salt tablets will be helpful.

Shock

The symptoms are pale face, weak pulse,

cold and clammy skin with partial or total unconsciousness. Lower the head, keep warm, rub limbs towards the heart. Give warm fluids if patient is not unconscious or suffering from suspected internal injuries.

Eyes Affected by Smoke

Bathe the eyes in weak saline solution (one teaspoon salt and 1 pint water) and rest the eyes. For severe cases rest in a darkened room applying a pad moistened in saline solution.

REMEMBER THAT EARLY MEDICAL ATTENTION IS ESSENTIAL IN ANY CASE OF SERIOUS INJURY

YOUR LIFE AND YOUR PROPERTY

You have just read of the many ways you can prevent fire . . . how you can protect your life, the lives of your family and your property against fire . . . and precautions you should take if you unfortunately come face to face with fire.

It is hoped that you will take notice of the instructions, the hints and the suggestions, because they have been presented in your interests and the interests of your fellow citizens of Victoria.

The fire-fighting agencies in Victoria—the Metropolitan Fire Brigade, the Country Fire Authority, and the Forests Commission —are always ready and willing to give any advice on fire prevention and protection. And when fire occurs they do not hesitate to use their full fire-fighting resources to protect you and your property. So co-operate with them to the full and this will be to your advantage.

While some fire restrictions may appear a little irksome they are imposed for everybody's protection, including yourself so PLEASE OBEY THEM.

ALWAYS REMEMBER THAT THE DANGER OF FIRE IS CONSTANT AND IN SUMMER THE NEED FOR CARE IS MORE IMPORTANT THAN EVER.

C. H. Rixon, Government Printer, Melbourne.

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